



Abstract of the Invention

A bifunctional protein comprising: 1) a single-chain antibody directed against a suitable antigen on a tumour cell, 2) a hinge region comprising from about 40 to about 200 amino acids joined to the V_L domain of the single chain antibody, and 3) a functional zeta (ξ) chain from the T-cell antigen receptor (TCR) joined to the hinge region, wherein the hinge region is an immunoglobulin-like hinge region which is joined to the C-terminus of the V_L domain of the single-chain antibody. The functional zeta (ξ) chain comprises the transmembrane and the cytoplasmic domain. The bifunctional protein can be expressed using a cytotoxic lymphocyte (CTL) expressing DNA encoding it.